



## Complete Summary

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### GUIDELINE TITLE

Testing for early lung cancer detection. In: American Cancer Society guidelines for the early detection of cancer.

### BIBLIOGRAPHIC SOURCE(S)

Smith RA, Cokkinides V, Eyre HJ. American Cancer Society guidelines for the early detection of cancer, 2003. CA Cancer J Clin 2003 Jan-Feb;53(1):27-43. [57 references] [PubMed](#)

Update 2001-testing for early lung cancer detection. CA Cancer J Clin 2001 Jan-Feb;51(1):59-64. [181 references]

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## SCOPE

### DISEASE/CONDITION(S)

Lung cancer

### GUIDELINE CATEGORY

Diagnosis  
Screening

### CLINICAL SPECIALTY

Family Practice  
Internal Medicine  
Nursing  
Oncology  
Preventive Medicine

Radiology  
Thoracic Surgery

#### INTENDED USERS

Advanced Practice Nurses  
Allied Health Personnel  
Health Care Providers  
Health Plans  
Hospitals  
Managed Care Organizations  
Nurses  
Patients  
Physician Assistants  
Physicians  
Public Health Departments

#### GUIDELINE OBJECTIVE(S)

To update health care professionals and the public on issues regarding testing for early lung cancer detection in light of emerging data on new imaging technologies

#### TARGET POPULATION

Individuals at risk for the development of lung cancer, including current and/or former smokers

#### INTERVENTIONS AND PRACTICES CONSIDERED

1. Chest x-ray
2. Low-radiation-dose computed tomography (i.e., spiral or helical computed tomography)
3. Sputum cytology
4. Molecular screening

#### MAJOR OUTCOMES CONSIDERED

Sensitivity of diagnostic imaging tests

### METHODOLOGY

#### METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

#### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

#### NUMBER OF SOURCE DOCUMENTS

Not stated

#### METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

#### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

#### METHODS USED TO ANALYZE THE EVIDENCE

Review

#### DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not applicable

#### METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

#### DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

#### RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

#### COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

#### METHOD OF GUIDELINE VALIDATION

Not stated

#### DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

### RECOMMENDATIONS

#### MAJOR RECOMMENDATIONS

Summarized by the National Guideline Clearinghouse (NGC):

The American Cancer Society does not recommend lung cancer screening for asymptomatic individuals at risk for lung cancer. However, individual physicians and patients may decide that the evidence is sufficient to warrant the use of screening tests on an individual basis.

In the past few years however, results from screening studies using spiral computed tomography (CT) have been regarded as sufficiently encouraging to lead a growing number of institutions and facilities to promote computed tomography screening to asymptomatic individuals at risk for lung cancer, with such promotion likely to increase. Since both media reports and local advertising may stimulate interest in spiral computed tomography testing among health care providers and individuals at higher risk, the American Cancer Society has determined that updated guidance about early lung cancer detection is appropriate. Further, given the high rate of positive results that occur with computed tomography screening for lung cancer and the complexity of the algorithm for working up small nodules, there is reason to be concerned about broad dissemination of lung screening outside of experienced, multi-specialty settings and prior to validation of this new technology.

For this reason, it is critically important during this period of evolving investigations into the efficacy of spiral computed tomography and other modalities that appropriate and influential professional organizations provide a foundation for best practices based upon the current state-of-the-art, and also promote informed decision-making for patients about possible benefits, risks, and limitations of testing for early lung cancer detection. Individuals interested in early detection also should be encouraged to participate in trials.

The American Cancer Society recommends that, to the extent possible, individuals at risk for lung cancer due to current or prior smoking history, history of significant exposure to second-hand smoke, or occupational history, be aware of their continuing lung cancer risk. Those who seek testing for early lung cancer detection should be informed about what is currently known about the benefits, limitations, and risks associated with conventional and emerging early detection technologies, as well as the associated diagnostic procedures and treatment.

Given the complexity of diagnostic and follow-up algorithms associated with early lung cancer testing, the American Cancer Society discourages testing in a setting that is not linked to multidisciplinary specialty groups for diagnosis and follow-up. Individuals who choose to undergo testing should have access to testing and follow-up that meet state-of-the-art standards, with informed decision-making at every step of an ongoing process. Ideally, the route to testing should be through an individual's primary care physician, who should be prepared to help patients understand their risks and reach informed decisions about testing, and to provide support if early detection tests are positive. Absence of a referral from a primary care physician due to lack of provider endorsement of testing, or not having a primary care provider, should not be a barrier to testing. However, if an individual seeks testing and does not have a referral from a primary care provider, the radiologist who provides testing is obliged to provide information about benefits, risks and limitations of testing as described above, and must become the individual's physician of record until proper alternative care arrangements can be

made. Individuals who are current smokers also should be informed that the more immediate preventive health priority is the elimination of tobacco use altogether, since smoking cessation offers the surest route at this time to reducing the risk of premature mortality from lung cancer.

#### CLINICAL ALGORITHM(S)

None provided

### EVIDENCE SUPPORTING THE RECOMMENDATIONS

#### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence is not specifically stated for each recommendation.

### BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

#### POTENTIAL BENEFITS

Reduced mortality associated with lung cancer

#### POTENTIAL HARMS

Not stated

### QUALIFYING STATEMENTS

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At the conclusion of the International Conference of Prevention and Early Diagnosis of Lung Cancer, held in Varese, Italy, conference participants endorsed a statement noting that the current evidence about the efficacy of lung cancer screening was an imperfect basis for public health policy, and in fact, results of the trials and case-finding series were paradoxical. While these data did not provide a sufficient basis to endorse lung cancer screening, neither were they persuasive that lung cancer screening is ineffective.

### IMPLEMENTATION OF THE GUIDELINE

#### DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

### INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

#### IOM CARE NEED

Staying Healthy

## IOM DOMAIN

Effectiveness  
Patient-centeredness

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

Smith RA, Cokkinides V, Eyre HJ. American Cancer Society guidelines for the early detection of cancer, 2003. CA Cancer J Clin 2003 Jan-Feb;53(1):27-43. [57 references] [PubMed](#)

Update 2001-testing for early lung cancer detection. CA Cancer J Clin 2001 Jan-Feb;51(1):59-64. [181 references]

### ADAPTATION

Not applicable: The guideline was not adapted from another source.

### DATE RELEASED

2001

### GUIDELINE DEVELOPER(S)

American Cancer Society - Disease Specific Society

### SOURCE(S) OF FUNDING

American Cancer Society

### GUIDELINE COMMITTEE

Not stated

### COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Not stated

### FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

### GUIDELINE STATUS

This is the current release of the guideline. It updates a previous version: Eddy D. ACS report on the cancer-related health checkup. CA Cancer J Clin 1980; 30: 193-240.

Each year the American Cancer Society publishes a summary of existing recommendations for early cancer detection, including updates, and/or emerging issues that are relevant to screening for cancer.

#### GUIDELINE AVAILABILITY

Print copies: Available from the American Cancer Society, 1599 Clifton Rd NE, Atlanta, GA 30329; Web site: [www.cancer.org](http://www.cancer.org).

#### AVAILABILITY OF COMPANION DOCUMENTS

These guidelines are published as a component of the following:

- Smith RA, von Eschenbach AC, Wender R, Levin B, Byers T, Rothenberger D, Brooks D, Creasman W, Cohen C, Runowicz C, Saslow D, Cokkinides V, Eyre H. American Cancer Society guidelines for the early detection of cancer: update of early detection guidelines for prostate, colorectal and endometrial cancers. Also: update 2001-testing for early lung cancer detection. CA Cancer J Clin 2001 Jan-Feb; 51(1): 38-75.

Print copies: Available from the American Cancer Society, 1599 Clifton Rd NE, Atlanta, GA 30329; Web site: [www.cancer.org](http://www.cancer.org).

#### PATIENT RESOURCES

None available

#### NGC STATUS

This summary was completed by ECRI on April 29, 2001. The information was verified by the guideline developer as of September 10, 2001.

#### COPYRIGHT STATEMENT

This NGC summary is based on the original guideline, which is subject to the guideline developer's copyright restrictions.

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